CERTIFICATE OF MAILING

Appeal Brief

Application Number	10/035,985
Filing Date	12/31/2001
First Inventor	Wang, Xingwu
Examiner Name	Dah-Wei D. Yuan
Art Unit	1745
Docket Number	XW-33 (393)

DATE OF DEPOSIT: 8/3/2004

TITLE OF CASE:

Implantable Fuel Cell

The following documents are enclosed:

Certificate of Mailing (1 page)

Fee Transmittal Form (in duplicate, 1 page per copy, 2 pages total)
Appeal Brief (in triplicate, 18 pages per copy, 54 pages total)
Return Postcard

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TO:
Mail Stop: Appeal Brief
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450.

FROM:
Howard J. Greenwald P.C.
349 W. Commercial Street, Suite 2490
East Rochester, NY 14445
Telephone (585) 387-0285
Fax (585) 387-0288

The Director is authorized to charge any additional fee(s) as needed during the pendency of this application to deposit account 50-2753.

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___ Howard J. Greenwald, Reg. No. 24,247
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PTO/SB/17 (10-03)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☑ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 165

Complete if Known	
Application Number	10/035,985
Filing Date	12/31/2001
First Named Inventor	Wang, Xingwu
Examiner Name	Dah-Wei D. Yuan
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Attorney Docket No.	XW-33 (393)

METHOD OF PAYMENT *(check all that apply)*

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☑ Deposit Account:

Deposit Account Number: 50-2753

Deposit Account Name: Howard J. Greenwald P.C.

The Director is authorized to: *(check all that apply)*

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FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) ($)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims		Fee from below		Fee Paid
Total Claims		-20** =		X	=
Independent Claims		- 3** =		X	=
Multiple Dependent					=

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($) 0

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for *ex parte* reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	165
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) ($) 165

SUBMITTED BY				(Complete *(if applicable)*)	
Name (Print/Type)	Peter J. Mikesell	*Registration No. (Attorney/Agent)*	54,311	*Telephone*	585-387-0285
Signature				*Date*	08/03/2004

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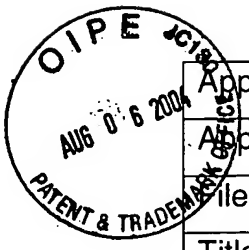
AF IFW



Application No.	10/035,985
Applicant	Wang, Xingwu
Filed	12/31/2001
Title	Implantable Fuel Cell
TC/A.U.	1745
Examiner	Dah-Wei D. Yuan
Docket No.	XW-33 (393)

Honorable Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Sir:

This is an Appeal to the Examiner's Office action of July 13, 2004 in which claims 1-3 and 6-18 were twice rejected.

08/09/2004 CCHAU1 00000022 502753 10035985
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1. REAL PARTY IN INTEREST

This utility patent application was filed in the names of Xingwu Wang, Chaonan Chen, and Huihui Duan. The application was subsequently assigned to Nanoset, LLC. Biophan Technologies Incorporated and Nanoset LLC have a licensing arrangement that concerns this application.

2. RELATED APPEALS AND INTERFERENCES

An appeal brief was previously filed on May 6, 2004 for this application. It is the applicants' believe that this appeal brief was never brought before the Board. There are no other appeals or interferences related to the instant application.

3. STATUS OF CLAIMS

Claims 1-3 and 6-18 have been rejected. Claims 4 and 5 have been canceled. No claims have been allowed. Claims 1-3 and 6-18 are the subject of this appeal.

4. STATUS OF AMENDMENTS

An Amendment was entered on May 6, 2004, wherein claims 4 and 5 were canceled so as to remove issues on appeal. Subsequently, an Office action was issued on July 13, 2004. This appeal brief is in response to the July 13 Office Action.

5. SUMMARY OF INVENTION

The first embodiment of the instant fuel cell is depicted in Figure 1 and in the corresponding description found in the specification. In the following summary, at least one location in the specification is cited to correspond to each limitation found in claim 1. It should be clear that the applicant is merely

summarizing one embodiment of the instant invention, and such a summary it not intended to be limiting.

Means for converting fat to glycerol and fatty acid is disclosed on page 7 beginning at line 20. In the embodiment depicted in Figure 1, this corresponds to element 46.

Means for converting glycerol to hydrogen is disclosed on page 11, beginning at line 5. In Figure 1, this corresponds to chamber 58.

Means for converting fatty acid to hydrogen is disclosed on page 9, beginning at line 10. In Figure 1, this corresponds to chamber 58.

Means for converting a bodily fluid to a gas selected from the group consisting of hydrogen, oxygen, and mixtures thereof is disclosed on page 13 at line 15, page 14 at line 3, and page 16 at line 7. In Figure 1, this corresponds to element 92.

Fuel cell means for producing electricity from hydrogen and oxygen is disclosed on page 11 beginning at line 5. In Figure 1, this corresponds, at least in part, to the fuel cell represented by anode 76, and cathode 94.

6. ISSUES

Issue 1 – Whether the rejection of claim 1-3 and 6-18 under 35 U.S.C. 112, first paragraph, as allegedly not enabled, was proper.

7. GROUPING OF CLAIMS

For the purposes of this appeal only, the applicant accepts without prejudice the presumption that the claims stand or fall together in view of all claims depending from independent claim 1.

8a. ARGUMENT

Issue 1 – Whether the rejection of claim 1-3 and 6-18 under 35 U.S.C. 112, first paragraph, as allegedly not enabled, was proper.

Overview

The Examiner has twice rejected claims 1-3 and 6-18 alleging they are not enabled by the specification as filed. Appellants previously filed an Appeal Brief addressing this same issue. The Board's guidance is courteously requested.

Prosecution History

This application received a first Office action on August 27, 2003 which contained an enablement rejection. Appellants filed a response on January 27, 2004. Thereafter, the Examiner issued a second (Final) Office action on February 12, 2004. Appellants responded by filing a Notice of Appeal (February 18, 2004), an Appeal Brief (March 1, 2004), and a Revised Appeal Brief and Amendment (May 6, 2004) wherein the amendment canceled claims 4 and 5 so as to remove issues from appeal. The appeal brief of May 5, 2004 posed a single issue:

Issue 1 – Whether the rejection of claim 1-3 and 6-18 under 35 U.S.C. 112, first paragraph, as allegedly not enabled, was proper.

The Appeal Brief of May 6, 2004 appears to have not been brought before the Board. As such, "Issue 1" has never been addressed by the Board. Instead, the Examiner reopened prosecution, acquiescing with respect to the issues in the first Appeal Brief, and then issued a third (Non-Final) Office action on July 13, 2004, alleging non-enablement on new grounds. Claims 1-3 and 6-18 have now been twice rejected. In compliance with M.P.E.P. 1205, appellants now file an Appeal Brief in a second attempt to place "Issue 1" before the Board. Reference may be had to M.P.E.P. 1205 which states:

> Under 37 CFR 1.191(a), an applicant for a patent dissatisfied with the primary examiner's decision in the second or final rejection of his or her claims may appeal to the Board for review of the examiner's rejection by filing a notice of appeal and the required fee set forth in 37 CFR 1.17(b) within the time period provided under 37 CFR 1.134 and 1.136. A notice of

> appeal may be filed after any of the claims has been twice rejected, regardless of whether the claim(s) has/have been finally rejected.

The appellants believe that an Appeal to the Board would provide a forum wherein a plurality of Examiners would be able to better evaluate the alleged enablement issues of the instant claims. This was the belief of the appellants after the second Office action.

This second Office action clearly showed an improper enablement rejection. The appellants believed that an Appeal would provide the Board a forum wherein the Board could better educate the Examiner and the applicants as to the nature of the enablement requirement. Unfortunately, it appears that the Appeal never made it to the Board, and no such forum was utilized. Appellants are now faced with a new enablement rejection, which is no more valid than the first. Appellants have filed a second Appeal Brief, substantially identical to the first Appeal Brief. The second Appeal Brief presents the same issue to the board:

Issue 1 – Whether the rejection of claim 1-3 and 6-18 under 35 U.S.C. 112, first paragraph, as allegedly not enabled, was proper.

It is the sincere hope of the appellants this second Appeal Brief will be presented to the Board and that the Board will be able to provide the Examiner with guidance.

Arguments

Judging from the three Office actions in this application file history, it appears that the Examiner has repeatedly used an "enablement" rejection to describe any disagreement the Examiner has with the specification and/or claims, regardless of the statutory requirements of an enablement rejection. This was clearly the case in the first Office action.

In this first Office action, the examiner asserted the claim element "microknife" was not enabled. The Examiner then proceeding to reject all claims in the application as non-enabled, *including those which did not contain the*

microknife element. This demonstrates a serious misunderstanding of the enablement requirement. This error was pointed out in the applicant's response, but *the Examiner did not find this argument persuasive.* A second (Final) Office action was issued. Only when an Appeal was filed, did the Examiner acquiesce with the appellants.

After the Examiner's acquiesce, the Examiner then issued a third Office action which contained yet another enablement rejection. The enablement rejection found in this third Office action is no more well founded than that found in the first and second Office actions. Included in this Appeal Brief are the appellants' arguments concerning this new enablement rejection.

The arguments contained in this Appeal Brief may be subdivided into three sections:

1. Violation of the Theory of Compact Prosecution.
2. What the Examiner asserts is an enablement issue, is not an enablement issue.
3. Appellants are unable to respond to all arguments due to unclear diction.

VIOLATION OF THE THEORY OF COMPACT PROSECUTION

The Theory of Compact Prosecution holds that the Examiner should put forth the best possible rejection in the first Office action. In this manner both the Office and the applicant(s) for Letters Patent may avoid expending unnecessary time, effort, and financial resources by endlessly rehashing the same issue. Appellants respectfully submit that the myriad of Office actions, all centered about the same issue, violate the Theory of Compact Prosecution. Reference may be had to section 2106 of the M.P.E.P.

> M.P.E.P. § 2106 states "It is essential that patent applicants obtain a prompt yet complete examination of their applications. Under the principles of compact prosecution, each claim should be reviewed for compliance with every statutory requirement for

> patentability in the initial review of the application, even if one or more claims are found to be deficient with respect to some statutory requirement. Thus, Office personnel should state all reasons and bases for rejecting claims in the first Office Action. Deficiencies should be explained clearly, particularly when they serve as a basis for a rejection. Whenever practicable, Office personnel should indicate how rejections may be overcome and how problems may be resolved. A failure to follow this approach can lead to unnecessary delays in the prosecution of the applications."

Specifically, when enablement is at issue, section 2164.01 of the M.P.E.P. provides additional guidance:

> M.P.E.P. § 2164.04 states "In accordance with the principles of compact prosecution, if an enablement rejection is appropriate, the first Office action on the merits should present the best case with all the relevant reasons, issues, and evidence so that all such rejections can be withdrawn if applicant provides appropriate convincing arguments and/or evidence in rebuttal. Providing the best case in the first Office action will also allow the second Office action to be made final should applicant fail to provide appropriate convincing arguments and/or evidence. Citing new references and/or expanding arguments in a second Office action could prevent that Office action from being made final. The principles of compact prosecution also dictate that if an enablement rejection is appropriate and the examiner recognizing the limitations that would render the claims enabled,

> the examiner should note such limitations to applicant as early in the prosecution as possible.
>
> In other words, the examiner should always look for enabled, allowable subject matter and communicate to applicant what that subject is at the earliest point possible in the prosecution of the application." (emphasis in original)

Appellants submit that the three Office Actions that were issued in this application all address the same issue: Are the claims enabled? In an attempt to bring this enablement issue to a close, appellants asked for the Board's guidance when they filed their Notice of Appeal on February 18, 2004. Instead of resolving the issue by presenting it to the Board, appellants received yet another Office action. This third Office action raised new rejections which the Examiner failed to raise in the first Office action.

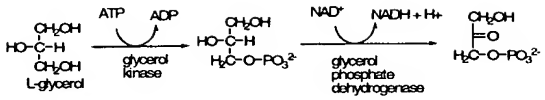
It is the belief of the appellants that the enablement rejection found in this third Office action is no more valid than the enablement rejection found in the first and second Office actions, which have since been abandoned by the Examiner. Moreover, appellants foresee an endless cycle of Office Actions and Appeals in store for this application. In addition to incurring significant expense for the appellants, such a cycle is clearly not in compliance with the Theory of Compact Prosecution. In an earnest attempt to prevent such a cycle, appellants now submit a second Appeal Brief. Appellants respectfully request that this second Appeal Brief be presented to the Board.

WHAT THE EXAMINER ASSERTS IS AN ENABLEMENT ISSUE, IS NOT AN ENABLEMENT ISSUE

The Examiner has rejected claims 1-3 and 6-18 stating:

> Claims 1-3,6-18 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains,

or with which it is most nearly connected, to make and/or use the invention. Claim 1 recites an implantable fuel cell assembly comprising means for converting fat to glycerol and fatty acid, in which lipase enzymes [sic] is the preferred embodiment that catalyzes the hydrolysis of fats to glycerol and fatty acids. See instant disclosure, page 7, line 18 to page 8, line 2. However, it is well know in the art that enzymatic reaction *in vivo* is a complex process which depends on many factors, including but not limited to temperature, pH and salt concentration. From the viewpoint of lipid metabolism, lipase enzyme, as are many proteins, is rapidly denatured. It is unclear how the lipase enzymes can effectively be replenished and/or regenerated to retain the conversion process. The disclosure does not discuss or suggest the source of the lipase enzymes and how the degradation of the enzymes might affect the process. Moreover, fatty acids is known [sic] to form micelles that act as detergents to disrupt protein and membrane structure and would therefore be toxic to humans if the concentration is higher than 10^{-6} M. The disclosure does not elaborate or even mention the potential catastrophic events to the recipient of such implant. This raises doubts about the feasibility and practicality for the use of fatty acid as an intermediate product in the production of hydrogen fuel. More importantly, it is know [sic] in the art that glycerol can be broken down to become dihydroxyacetone phosphate and hydrogen proton (H^+) as shown in the reaction below.



In contrary, the instant disclosure teaches the use of molecular hydrogen (H_2) as fuel to produce electricity as recited in claim 1 and Figure 1. The difference in describing the chemical and biological characteristic of the fuel does not enable a person of ordinary skill in the art to make and use the claimed invention. See "Biochemistry" by Donald Voet and Judith Voet, John Wiley & Sons (1990), pp. 618-621.

The Examiner has rejected all outstanding claims in the instant application as allegedly not being enabled by the specification. For such an enablement rejection to be tenable, the Examiner has the burden of demonstrating that the specification fails to teach one of ordinary skill in the art how to make and use the claimed invention without undue experimentation. Reference may be had to the M.P.E.P. § 2164.04 "The language (of the Office action) should focus on those factors, reasons, and evidence that lead the examiner to conclude that the specification fails to teach how to make and use the claimed invention without undue experimentation, or that the scope of any enablement provided to one skilled in the art is not commensurate with the scope of protection sought by the claims." Furthermore, M.P.E.P. § 2164.05 states that "The examiner should **never** make the determination based on personal opinion." (emphasis in original)

It is the position of the appellants that the Examiner has failed to establish that the specification does not teach one how to practice the invention. Instead, the Examiner has cited elements of the specification (not the claims) and presents arguments which seem to focus on the commercial viability of the invention. Commercial viability issues are separate and distinct from enablement issues, yet the Examiner seems to be incorrectly asserting that they are one in the same.

To illustrate, claim 1 is reproduced below:

> 1. (Original) An implantable fuel cell assembly comprised of means for converting fat to glycerol and fatty acid, means for converting glycerol to hydrogen, means for converting fatty acid to hydrogen, means for converting a bodily fluid to a gas selected from the group consisting of hydrogen, oxygen, and mixtures thereof, and fuel cell means for producing electricity from hydrogen and oxygen.

Analysis of the instant Office action will show that the Examiner has failed to allege that any of the elements of the claims are not taught, yet the Examiner has made an enablement rejection anyway. This is the same basic argument that the appellants initially sought relief from when they filed the first Appeal Brief. In the first Office action claim 1 was rejected as allegedly not enabled. In the first Office action the examiner cited elements which were not contained in claim 1. The instant rejection is similar. In the instant rejection, the Examiner appears to be setting the stage for an enablement rejection, but then fails to provide the basis for such an enablement rejection.

The Examiner first sets the stage for what the appellants believe will be the rejection by stating:

> Claim 1 recites an implantable fuel cell assembly comprising means for converting fat to glycerol and fatty acid, in which lipase enzymes is the preferred embodiment that catalyzes the hydrolysis of fats to glycerol and fatty acids. See instant disclosure, page 7, line 18 to page 8, line 2.

The appellants note this is the one and only reference to a claim element in the entire Office action. The Examiner has referenced "means for converting fat to glycerol and fatty acid." For an enablement rejection to be tenable, the Examiner must show that the specification fails to teach one of ordinary skill in

the art a method for converting fat to glycerol and fatty acid without undue experimentation. Instead of making such an argument, the Examiner states:

> However, it is well know in the art that enzymatic reaction *in vivo* is a complex process which depends on many factors, including but not limited to temperature, pH and salt concentration. From the viewpoint of lipid metabolism, lipase enzyme, as are many proteins, is rapidly denatured. It is unclear how the lipase enzymes can effectively be replenished and/or regenerated to retain the conversion process.

A method for replenishing and/or regenerating the lipase enzyme is not being claimed. The Examiner appears to be alleging that the appellants have an obligation to enable subject matter which is not being claimed. This is clearly incorrect. Moreover, the Examiner appears to be requiring that a perfected product be described in blueprint-like detail. This is simply not a requisite of the enablement requirement. M.P.E.P. § 2163.07(a) states

> "However, to comply with 35 U.S.C. 112, first paragraph, it is not necessary to 'enable one of ordinary skill in the art to make and use a perfected, commercially viable embodiment absent a claim limitation to that effect.' CFMT, Inc. v Yieldup Int'l Corp., 349 F.3d 1333, 1338, 68 USPQ2d 1940, 1944 (Fed. Circ. 2003)"
>
> "The error we see in Staehelin's approach to the question before us is that Staehelin would require a patent specification to be a blueprint which, if followed, would unfailingly reproduce exactly an applicant's claimed invention. However, the law does not require a specification to be a Blueprint in order to satisfy the requirement for enablement under 35 U.S.C. 112, first paragraph. *Staehelin v Secher* 24

> USPQ 2d 1513, 1516 (B.P.A.I. 1992) citing *In re Gay*, 309 F.2d 769, 135 USPQ 311 (CCPA 1962)."

The subject "replenishment issue" is unrelated to the enablement of the "means for converting fat to glycerol and fatty acid." The claims simply do not recite a "means for replenishing." Therefore, regardless of weather the specification teaches enough to enable a "means for replenishing," such a teaching simply does not touch on the merits of the enablement of the "means for converting fat to glycerol."

For example, one of ordinary skill in the art could make and use the claimed invention without ever replenishing the enzyme. Such a practice might limit the operable lifetime of the invention, but that is a commercial issue that would be addressed in the marketplace. This is not an enablement issue which should be addressed in the Patent and Trademark Office.

The Examiner continues to reject the claims based on similar commercial viability issues stating:

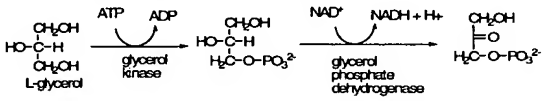
> Moreover, fatty acids is known [sic] to form micelles that act as detergents to disrupt protein and membrane structure and would therefore be toxic to humans if the concentration is higher than 10^{-6} M. The disclosure does not elaborate or even mention the potential catastrophic events to the recipient of such implant. This raises doubts about the feasibility and practicality for the use of fatty acid as an intermediate product in the production of hydrogen fuel.

The "safety" issue raised by the Examiner is not a statutory ground for an enablement rejection. M.P.E.P. § 2164.01(c) states "The applicant need not demonstrate that the invention is completely safe. See also MPEP § 2107.01 and § 2107.03." Once again the Examiner has apparently seen something in the specification that the Examiner did not approve of, and termed it an "enablement" rejection.

APPELLANTS ARE UNABLE TO RESPOND DUE TO DICTION OF OFFICE ACTION

The last section of the Office action contains another "enablement" rejection which the appellants have been unable to understand:

> More importantly, it is know [sic] in the art that glycerol can be broken down to become dihydroxyacetone phosphate and hydrogen proton (H^+) as shown in the reaction below.



> In contrary, the instant disclosure teaches the use of molecular hydrogen (H_2) as fuel to produce electricity as recited in claim 1 and Figure 1. The difference in describing the chemical and biological characteristic of the fuel does not enable a person of ordinary skill in the art to make and use the claimed invention. See "Biochemistry" by Donald Voet and Judith Voet, John Wiley & Sons (1990), pp. 618-621.

The appellants are unable to respond to the above rejection as it is unclear what is being rejected, why the rejection is being made, and what the Examiner means. Appellants are uncertain how to proceed.

Appellants fail to see how the teachings of the instant disclosure are "contrary" to the equation shown by the Examiner. Is the Examiner asserting that molecular hydrogen (H_2) cannot be used as a fuel to produce electricity? Is the use of molecular hydrogen (H_2) as a fuel "contrary" to the equation shown by the Examiner? This clearly cannot be the Examiner's true assertion, as entire tomes have been written describing the use of molecular hydrogen as a fuel. Clearly a practitioner in the fuel cell art would not consider such a use "contrary" to the conventional wisdom.

Moreover, appellants note that simply because glycerol is known to undergo a first reaction, does not preclude it from undergoing a second reaction. If this were the case, the entire of field of synthetic chemistry would not exist.

The Examiner goes on to say "The difference in describing the chemical and biological characteristic of the fuel does not enable a person of ordinary skill in the art to make and use the claimed invention." Appellants are once again uncertain how to proceed. It is unclear what is being rejected, why the rejection is being made, and what the Examiner means. Appellants believe that this prosecution of this application has progressed beyond the point where such unclear statements can be resolved with a simple phone call.

If this were the first Office action, an interview with the Examiner might resolve the ambiguities found in the last paragraph. However, when the appellants consider the extended prosecution history of this application, coupled with the multiple, and irregular rejections found in the file history of this application, appellants believe their best course is to remit the entire application to the jurisdiction of the Board.

8b. CONCLUSION

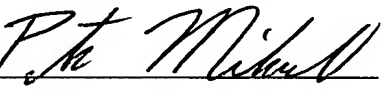
Appellants are making a good faith effort to assist the Office in complying with the Theory of Compact Prosecution. Their first attempt to facilitate the prosecution of this application took place when they filed the Notice of Appeal on February 18, 2004. It was their hope that the Board would intervene and resolve the dispute between the Examiner and the applicants. This dispute, through no fault of the applicants, was not resolved by the Board. Instead, the prosecution was extended yet again when a third Office action was issued. Appellants are concerned that the prosecution history of this application has become so muddled (again, through no fault of the appellants) that any resulting patent may be difficult to enforce due to such an unusual file history. If such a misreading of the prosecution history were to occur, this would be a grievous violation of the inventors' patent rights.

Appellants are now making a second attempt to facilitate the prosecution of this application. Appellants ask the Board to intercede and provide the appellants and the Examiner with guidance. Appellants believe it is a violation of the rules set fourth in the Manual of Patent Examining Procedure for any disagreement to simply be referenced as an "enablement rejection" with no regard to the statutory requirement of the enablement standards set fourth in the M.P.E.P. Such a violation is clearly unfair, especially since the Examiner has acknowledged that the invention is novel and unobvious as evidenced by the lack of anticipation and obviousness rejections.

For the extensive reasons advanced above, appellants respectfully contend that each claim is patentable. Therefore, reversal of all rejections is courteously requested.

To the extent necessary, please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 50-2753 and credit any excess fees to such deposit account. If necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made.

Respectfully submitted,
Howard J. Greenwald P.C.

By 

Peter J. Mikesell
Reg. No. 54,311
Telephone (585) 387-0285
Fax (585) 387-0288

9. APPENDIX

1. (Original) An implantable fuel cell assembly comprised of means for converting fat to glycerol and fatty acid, means for converting glycerol to hydrogen, means for converting fatty acid to hydrogen, means for converting a bodily fluid to a gas selected from the group consisting of hydrogen, oxygen, and mixtures thereof, and fuel cell means for producing electricity from hydrogen and oxygen.
2. Original) The implantable fuel cell assembly as recited in claim 1, wherein said implantable fuel cell assembly is disposed beneath the skin of a human being.
3. (Original) The implantable fuel cell assembly as recited in claim 2, wherein said implantable fuel cell assembly is disposed near fat cells.
4. (Canceled) ~~The implantable fuel cell assembly as recited in claim 1, wherein said implantable fuel cell assembly is comprised of means for harvesting fat cells.~~
5. (Canceled) ~~The implantable fuel cell assembly as recited in claim 4, wherein said means for harvesting fat cells is comprised of a microknife.~~
6. (Original) The implantable fuel cell assembly as recited in claim 1, wherein said means for converting said fat to said glycerol and said fatty acids is comprised of a fat-permeable material.
7. (Original) The implantable fuel cell assembly as recited in claim 6, wherein said means for converting said fat to said glycerol and said fatty acids is comprised of lipase enzyme.
8. (Original) The implantable fuel cell assembly as recited in claim 7, wherein from about 3 to about 10 percent of said lipase enzyme is present, based upon the total mass of said lipase enzyme and said fat.
9. (Original) The implantable fuel cell assembly as recited in claim 8, further comprising a porous material with an average pore size of less than about 10 nanometers.

10. (Original) The implantable fuel cell assembly as recited in claim 1, wherein said means for converting said fatty acids to hydrogen is comprised of beta oxidase enzyme.

11. (Original) The implantable fuel cell assembly as recited in claim 10, wherein said means for converting said fatty acids to hydrogen is comprised of oxaloacetate.

12. (Original) The implantable fuel cell assembly as recited in claim 1, further comprising a glycerol fuel cell.

13. (Original) The implantable fuel cell assembly as recited in claim 12, wherein said glycerol fuel cell is comprised of an anode and anode enzyme disposed on said anode, wherein said anode is configured and arranged for electroxidizing an anode reductant in the presence of the anode enzyme.

14. (Amended) The implantable fuel cell assembly as recited in claim 13, wherein said glycerol fuel cell is comprised of a cathode spaced apart from said anode and cathode enzyme disposed on said cathode, wherein said cathode is configured and arranged for electroreducing a cathode oxidant in the presence of said cathode enzyme.

15. (Original) The implantable fuel cell assembly as recited in claim 1, wherein said gas is oxygen.

16. (Original) The implantable fuel cell assembly as recited in claim 1, wherein said fuel cell assembly further comprises a rechargeable power supply.

17. (Original) The implantable fuel cell assembly as recited in claim 16, wherein said fuel cell assembly further comprises a piezoelectric means for converting electricity into mechanical motion.

18. (Original) The implantable fuel cell assembly as recited in claim 16, wherein said fuel cell assembly further comprises electrostrictive means for converting electricity into mechanical motion.